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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506,779	02/18/2000	Dennis P. Curran	99-038	7918

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Henry E Bartony Jr  
Suite 1801 Law & Finacne Building  
429 Fourth Avenue  
Pittsburgh, PA 15219

EXAMINER

GARCIA, MAURIE E

ART UNIT	PAPER NUMBER
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1627

DATE MAILED: 02/12/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/506,779

Applicant(s)

Curran et al

Examiner  
Maurie E. Garcia, Ph. D.

Art Unit  
1627



-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Nov 20, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above, claim(s) 4-9 and 17-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 10-16, and 45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirements.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 20) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The Response filed November 20, 2001 (Paper No. 6) is acknowledged. No claims were cancelled, amended or added. Therefore, claims 1-45 are pending.

#### ***Election/Restriction***

2. Applicant's election, with traverse, of Group I (claims 1 (in part), 2, 3, 10, 11-16 and 45) is acknowledged. The traversal is addressed below.

3. Applicant argues that the searches for each of the methods of Groups I & V; II & VI; III & VII and IV & VIII would be coextensive based on the fact that each method "involves the steps of tagging compounds with tagging moieties and separating those compounds". The examiner disagrees as each of these methods relies on a different chemical/physical mechanism for separation which would each require a separate search in both the patent and non-patent literature. These searches would not be coextensive. Art anticipating one group would not anticipate the other groups and each group could support a separate patent.

4. Applicant also argues that since Groups I and V rely on difference in fluorous nature/fluorous tags, these methods should be examined together. However, as stated in the Restriction Requirement these methods are different because they use different steps, require different reagents and will produce different products and/or results. They

therefore have different issues regarding patentability and enablement and represent patentably distinct subject matter. The methods of Groups I and V are different from each other because they have completely different steps and end results. The method of Groups V requires that "at least one chemical reaction" is performed; this is not required for Group I. Furthermore, the methods of Groups I-IV are methods "of separating compounds", while the methods of Groups V-VIII are methods "for carrying out a chemical reaction". These are clearly different end results. The searches of these two methods would not be coextensive. Art anticipating one group would not anticipate the other group and each group could support a separate patent.

5. Therefore, for the reasons set forth above, the undue search burden is established in the instant case. The requirement is still deemed proper and is therefore made FINAL.

6. Claims 4-9 and 17-44 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to non-elected inventions, the requirement having been traversed in Paper No. 6.

7. Therefore, claims 1 (in part), 2, 3, 10, 11-16 and 45 are examined on the merits in this action. Note that claim 1 is examined to the extent of the elected subject matter only.

***Drawings***

8. The drawings filed with the application are acceptable for examination and are approved by the PTO draftsman.

***Specification***

9. The abstract of the disclosure is objected to because it is too long. Correction is required. See MPEP § 608.01(b): The abstract should be in narrative form and generally limited to a single paragraph within the range of 50 to 250 words. The abstract should not exceed 25 lines of text.

***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 3, 13, 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. Claims 3 and 13 lack clear antecedent basis for the terms “the first tagged compounds” and “the second tagged compounds” (emphasis added). The claims from which these claims depend refer to “the first tagged compound” and “the second tagged compound”.

B. Claim 15 lacks antecedent basis for the terms “first fluororous tagging moiety” and “second fluororous tagging moiety”. The claim from which this claim depends (claim 14) has no recitation of this terminology whatsoever.

C. Claim 16 lacks antecedent basis for the terms “the first tagged compounds” and “the second tagged compounds”. The claims from which this claim depends (claims 15 and 14) have no recitation of this terminology whatsoever.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claim 45 is rejected under 35 U.S.C. 102(b) as being anticipated by Still et al (US 5,565,324).

Still et al discloses “encoded combinatorial chemistry” (See Abstract).

Various tags are used as markers to identify compounds present in a chemical library (see column 3, lines 5-45). The reference discloses that N identifiers can uniquely encode  $2^N$  different compounds (column 3, lines 9-31). Specifically the reference discloses that “differentiation of tags can be achieved with physical differences, e.g. ...chromatographic retention time using gas or liquid

chromatography (see column 26, lines 63-67; also column 7, lines 32-52). Still et al discloses changing the chemical nature of the tag to achieve a “desired separation” (column 27, lines 1-31).

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made, absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

16. Claims 1 (in part), 2, 3, 10, 11-16 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Still et al (US 5,565,324) in view of Curran et al (US 5,859,247).

Still et al teaches “encoded combinatorial chemistry” (See Abstract).

Various tags are used as markers to identify compounds present in a chemical library (see column 3, lines 5-45). The reference teaches that N identifiers can uniquely encode  $2^N$  different compounds (column 3, lines 9-31). Specifically the reference teaches that “differentiation of tags can be achieved with physical differences, e.g. ...chromatographic retention time using gas or liquid chromatography (see column 26, lines 63-67; also column 7, lines 32-52). Still et al teaches changing the chemical nature of the tag to achieve a “desired separation” (column 27, lines 1-31). This reads on the limitation of the instant claim 10.

Still et al lacks the specific teaching of using fluororous tags and fluororous reversed phase chromatography.

However, such tags and chromatographic methods were well established in the art at the time of filing. For example, Curran et al teach separation techniques where “organic/fluororous phase separation techniques are used to effect separations” (see Abstract). These techniques are defined in column 3, line 35 - column 4, line 4 of the reference and read on instant claims 1, 2, 11, 12, 14 and 15. Reversed phase chromatography is specifically described, column 3, line 49 - column 4, line 4 (reading on claims 3, 13 and 16). Curran et al teach that these methods are preferred for separations (and synthesis) of combinatorial libraries (see column 8, line 50 – column 9, line 32).



Therefore it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to use the fluoruous tags and fluoruous reversed phase chromatography of Curran et al in the method of tagging combinatorial libraries of Still et al. A person of ordinary skill in the art would have been motivated to do so in order to have preferable and facile means to separate and identify library compounds (see Curran et al, column 8, lines 12-32).

### ***Double Patenting***

17. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

18. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b). Effective January 1, 1994, a

registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

19. Claims 1 (in part), 2, 3, 10, 11-16 and 45 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of US 5,859,247. Although the conflicting claims are not identical, they are not patentably distinct from each other because the recited claims in each application encompass separations based on differences in fluororous nature. The instant method uses more than one tagging moiety, while the method of US 5,859,247 only recites one tagging moiety. However, the method instantly claimed would be obvious over that in claims 1-9 of US 5,859,247 because to use more than one tagging moiety (to aid in the separation) would be obvious to one of ordinary skill.


***Status of Claims/Conclusion***

20. No claims are allowed.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maurie E. Garcia, Ph.D. whose telephone number is (703) 308-0065. The examiner can normally be reached on Monday-Thursday from 9:30 to 7:00 and alternate Fridays.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jyothsna Venkat, can be reached on (703) 308-2439. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4242. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Maurie E. Garcia, Ph.D.  
February 8, 2002



MAURIE E. GARCIA, PH.D.  
PATENT EXAMINER